Incapacity and re-integration in Belgium : navigating between scientific and economic influences

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Université de Liège

A few milestones on the time line

- 2004 : multidisciplinary rehabilitation program for low back pain patients
- 2006 : law on professional reintegration
- 2009 : enrichment of the social insurance physicians legal roles
- 2011 : « back to work » project at the government level
- 2013 : facilitation of partial return to work
- 24/11/2016 : new legal framework for reintegration at work of patients on sickness benefits

Networking health care practitioners and OH prevention services for early rehabilitation of low back pain workers

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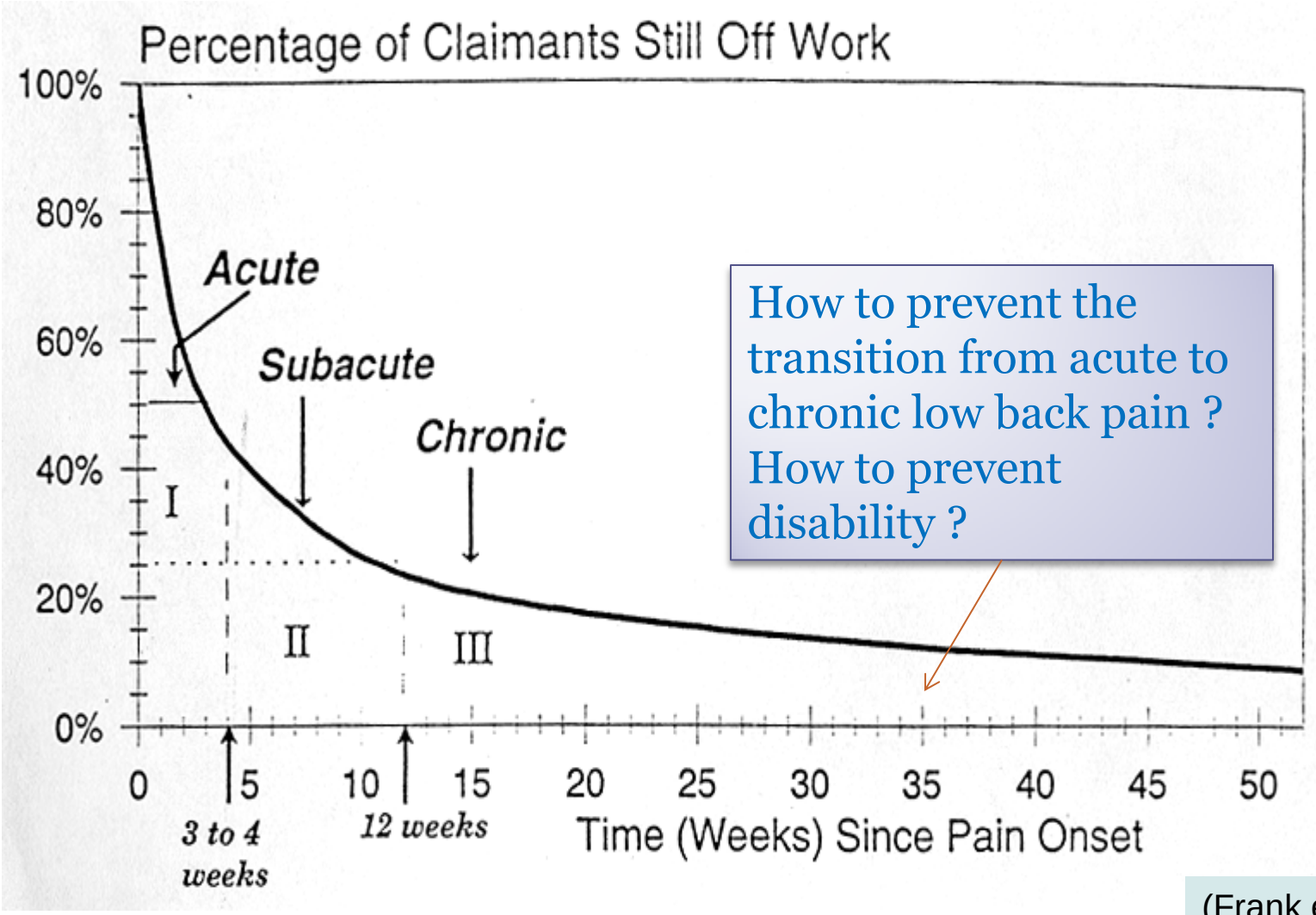
fmp fbz

Project scientific background



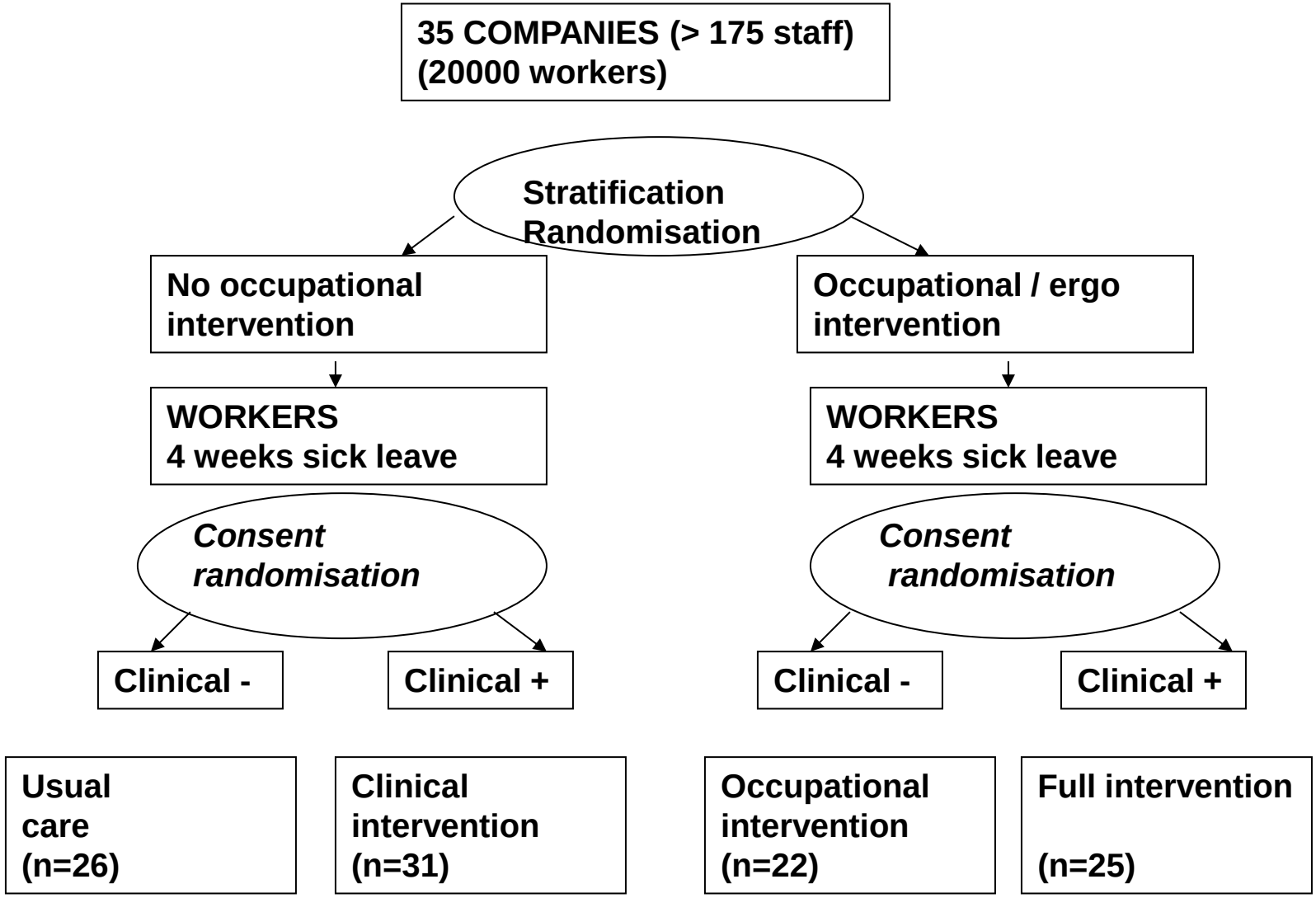
(Frank et al. 1996)

Prevention of low back pain transition to chronicity

- New paradigm opened by the Quebec task force report (Spitzer et al 1987) outlining step by step interventions with predetermined time frames and explicit assessment criteria for low back pain patients/workers

- New perspective : a multifactorial phenomenon needs multidisciplinary interventions involving social, medical, regulatory, and/or economic components

The Sherbrooke model RCT, Quebec
[Loisel et al. 1994]



Sherbrooke model : return to work results [Loisel et al 1997]

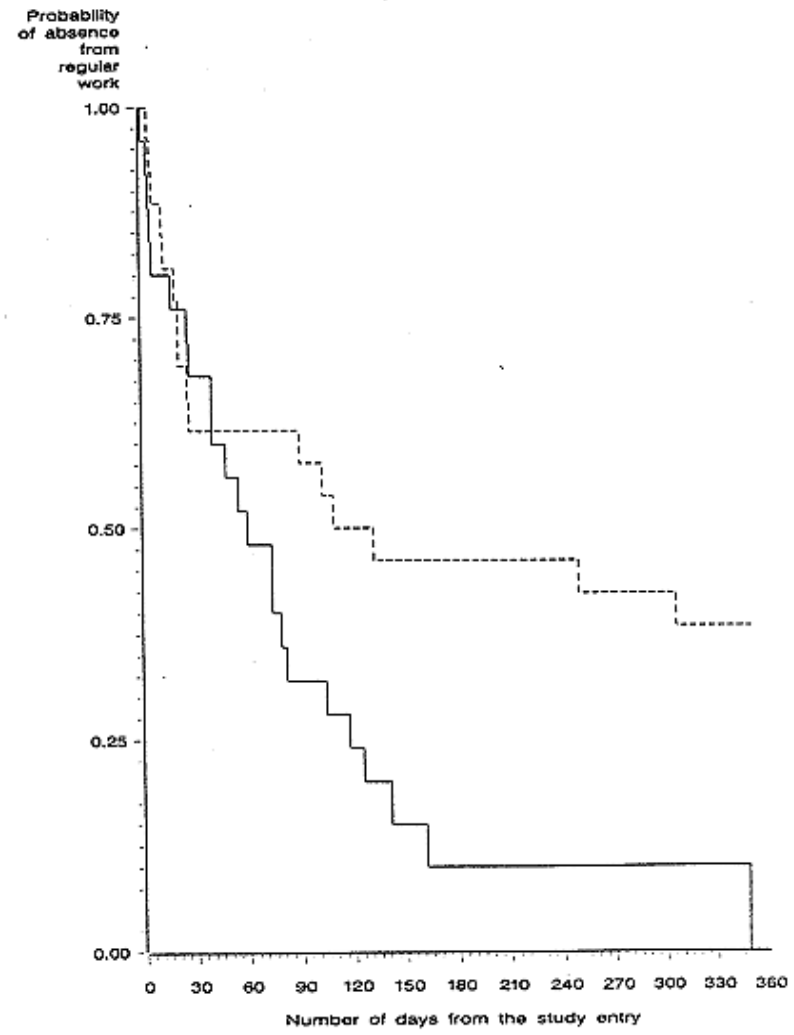
Intervention

…… usual care

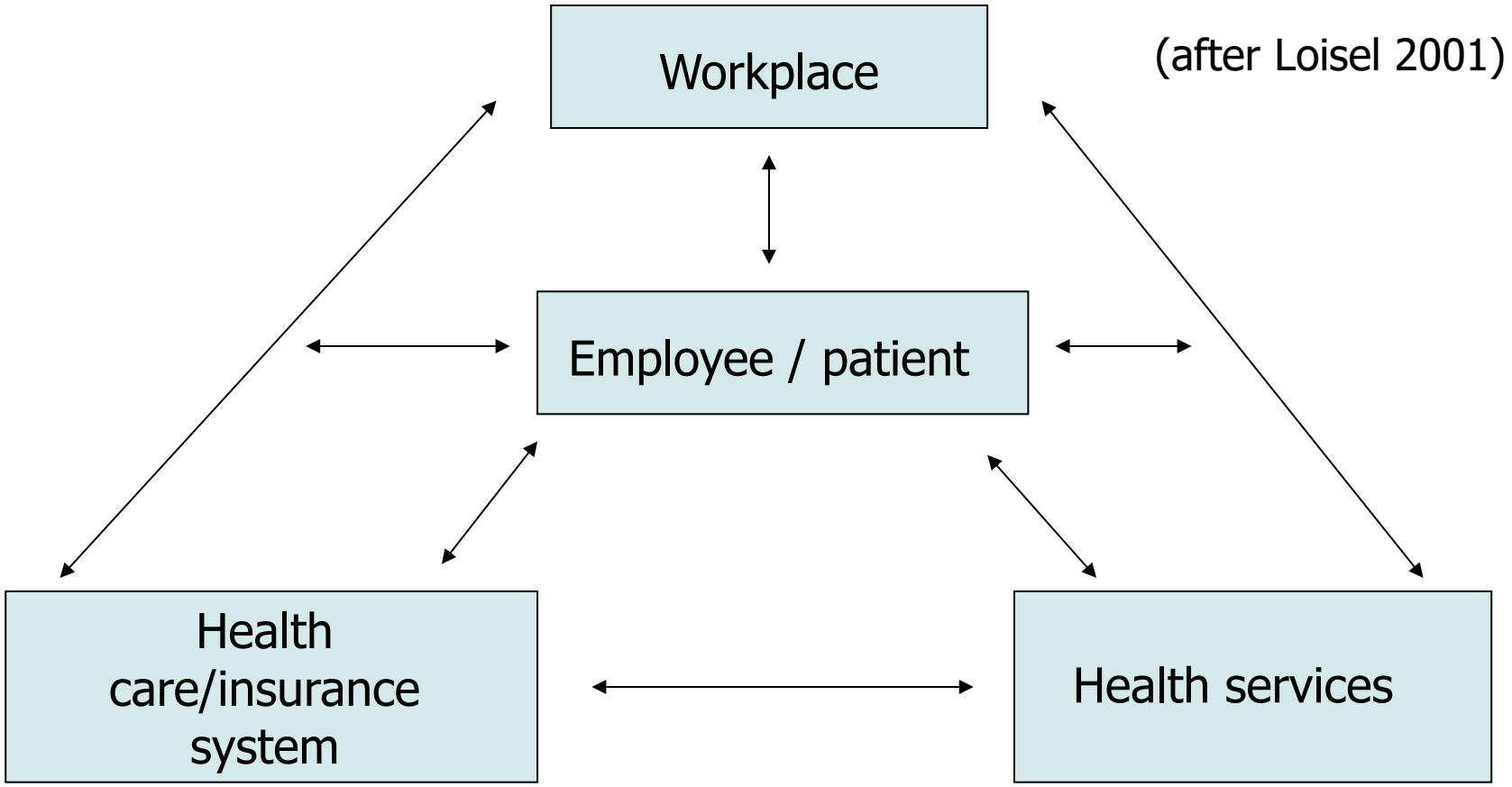
_____ full

Signification :

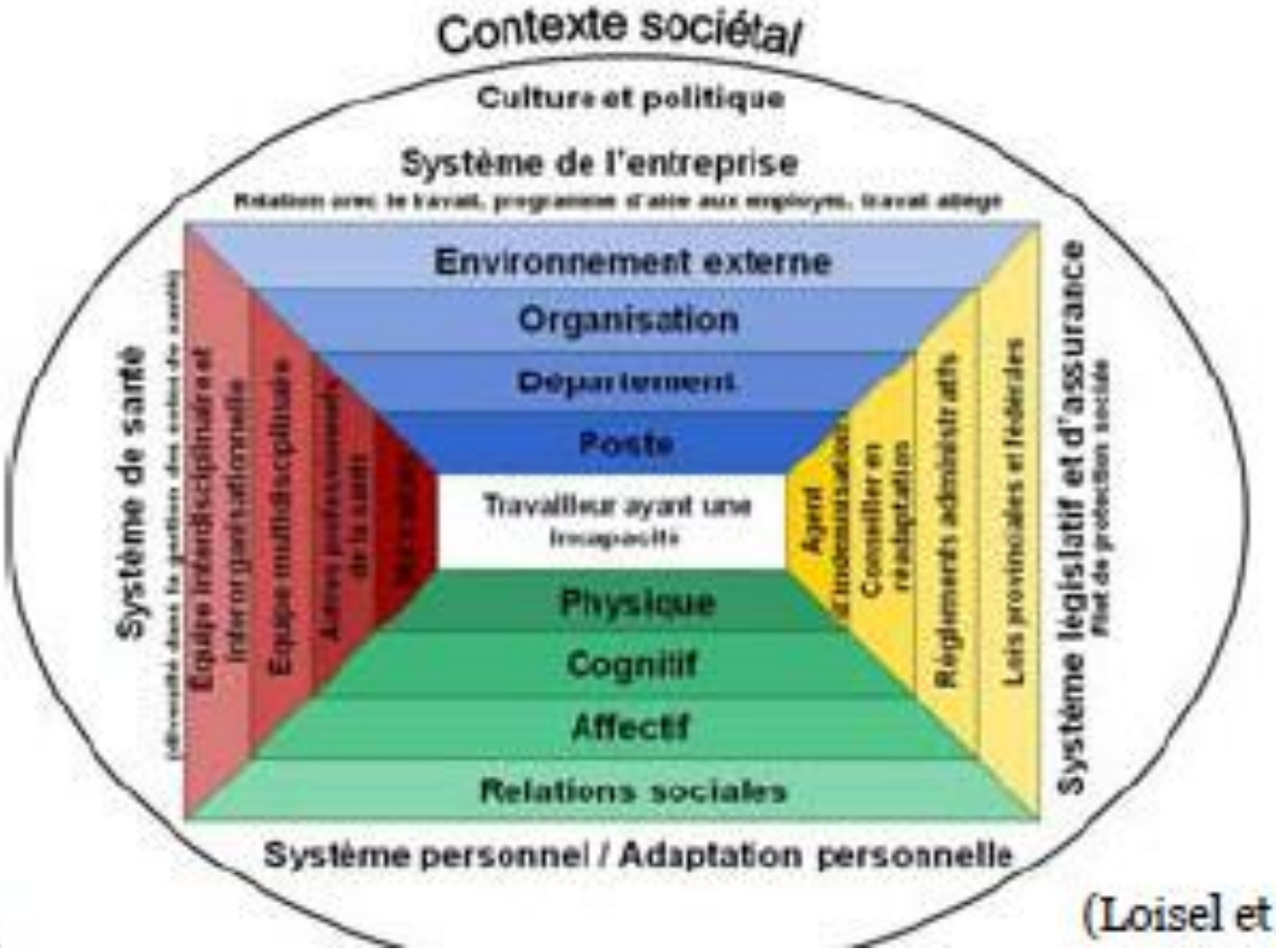
p = 0.022



Prevention of chronic LBP and disability
Who should be involved ?



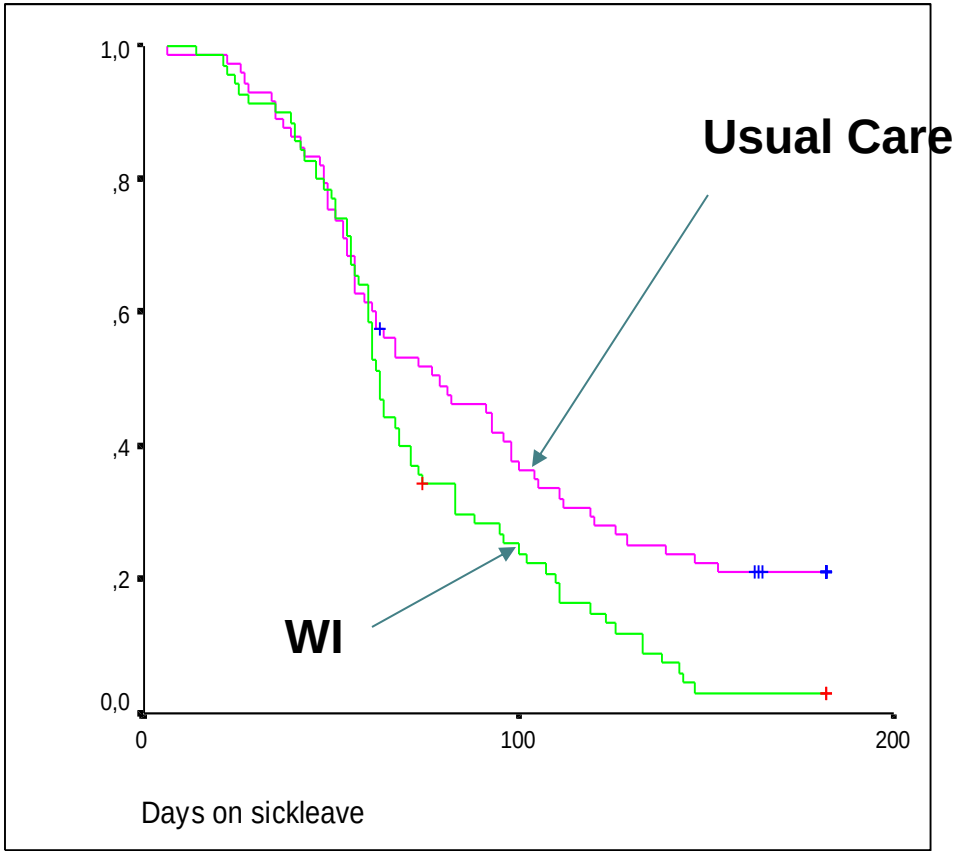
The arena of disability prevention



(Loisel et al, 2005)

Dutch replication of the Sherbrooke model : workplace intervention impact

- Outcome: N calendar days until lasting (>28 d.) return to own work
- WI Usual Care
  64 days 79 days
  (median; logrank p=.011)
- Cox regression analysis; Intention to treat/per protocol
- **Workplace intervention effective after 60 days of sick leave and onwards (hazard ratio = 2.5 [CI 1.5 to 4.1]; p=0.0003).**



Steenstra, Anema 2004

How to avoid LBP transition to chronicity ? Evidence based guidelines

- **Speed up the return to work if worker still absent after 4-6 weeks** through structured RTW intervention programs
  - target : GP's, but also employers, occupational health physicians (OP's), ergonomists, …
- RTW programs associating
  - Multidisciplinary treatment programs of a medical nature (health care sector)
  - Workplace or ergonomics intervention (OH prevention services and enterprises)

Belgian project background

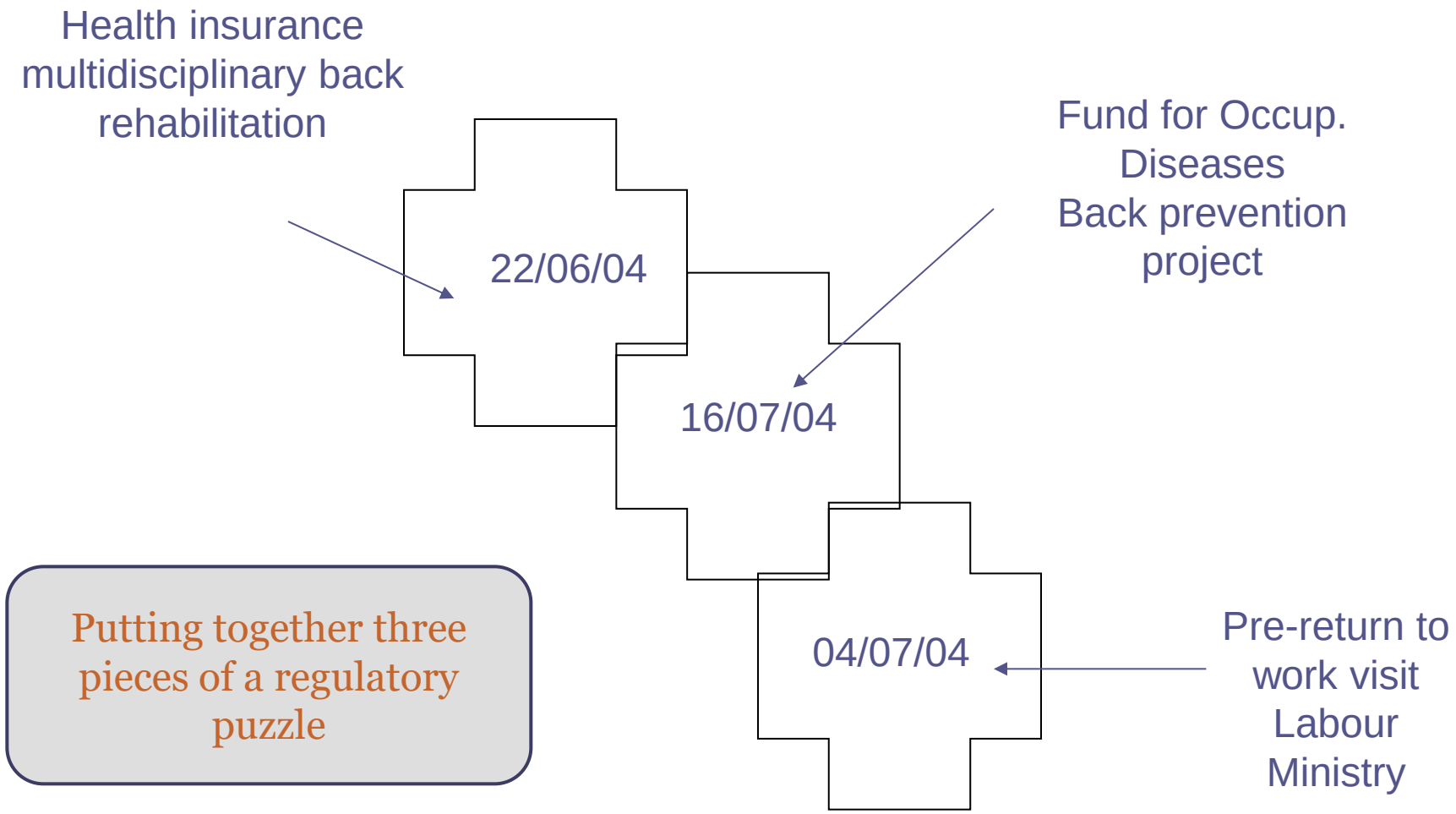
- *Scientific evidence in favour of "return to work" programs (Sherbrooke model…)*

- The Belgian Health Minister, Frank Vandenbroeck, with an Oxford Ph.D, …and a strong interest for evidence-based practices
- At the Health Ministry and National Institute for Health and Disability insurance (NIHDI) level, need for balancing the health care budget : decision to rationalize the physiotherapy sector and to cut reimbursement of non-ebm therapies

Belgian project background

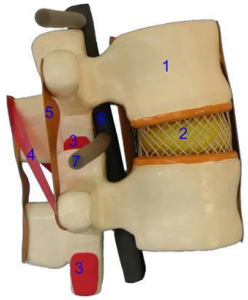
- Social pressure upon the Fund for Occupational Diseases (FOD) to get a formal recognition for work-related diseases (low back pain, burnout,…) and to do something for the neglected burdened back of health care workers (mainly women)
- A 3-yrs discussion process : should one
  - Compensate back pain workers ? And if so, how to limit the expected costs ?
  - Devote money instead to secundary prevention ?

Integrating disability prevention in the country health system ? The Belgian case



The NIHDI health care multidisciplinary back rehabilitation program

36 sessions (max)
of 2 hr duration
for groups of 8



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Pain emotional components by a psychologist

Ergonomics module by a trained team member

FOD back prevention program background - 2004

- Back pain became the 1st recognised work-related disease (this new legal category may benefit from prevention programs but not from compensation allowances)

- a “Royal decree” allowed the Fund to launch a pilot project for back pain prevention
  - among nursing staff exposed to back pain risk factors in general or geriatric hospitals
-

The FOD back prevention program : promoting an early return to work

After a pilot phase (2005-06)
Royal Decree 17th May 2007

FOD is offering besides the NIHDI rehabilitation program
a complementary RTW program for workers exposed either to material manual handling or to whole body vibrations.

The FOD back prevention program

Medical axis

Incentives to the worker for entering the health care back rehabilitation program

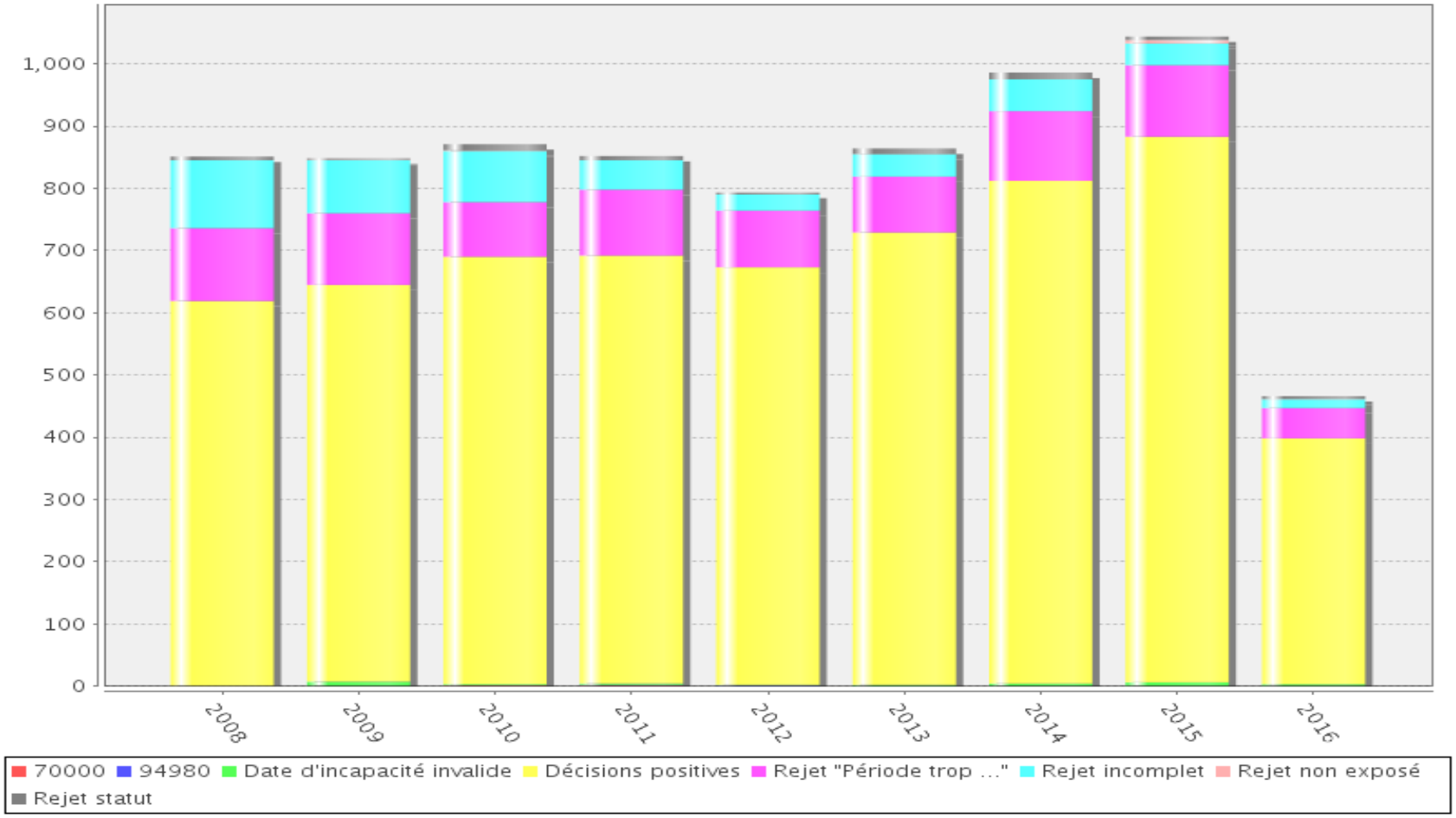
Workplace axis

Ergonomic analysis of the worker tasks (402 € incentive for the employer)

Networking between care and prevention physicians

Today : 70 collaborating rehabilitation centres

Participating workers



Challenges to overcome ?

Main challenges to overcome in implementing such a social innovation

- Informing the target population (patients + physicians) as yearly participation rate remains rather low
- Ensuring a balanced application of the program : among the participating workers, only 25% (on average) benefit from a workplace intervention
- Promoting inter-professional collaboration between GP's, OP's and physicians from the rehab centres

Barriers to participation

- For back pain sufferers :
  - The opportunity to meet the OP during the sick leave still not known by many workers
  - Wrong beliefs : “exercise would aggravate my injury”
  - Access : no rehab centre close to my home
- For GP’s:
  - Some (many?) are not in favour of active treatments
  - Some (many?) are afraid not to get the patient back after the treatment in the rehab. centre or are putting more emphasis on passive treatments for LBP

Challenges to overcome : ensuring a balanced application of the program

- Medical rehabilitation component most used :
  - It benefits from the support given by the health care system : content and procedures precisely defined, good return on investment if applied at a large scale….
- Workplace intervention less developed:
  - content not so well formalized
  - money incentives too low from the OHS point of view
  - difficult to carry out if not part of a prevention policy endorsed by the employer and the workers representatives
  - employers' culture of "100% fit for work" does not match the program aim : facilitating a progressive and early return to work

Challenges to overcome : promoting inter-professional collaboration

- For > 40 yrs caring GP'S and specialist physicians have been encouraged not to collaborate with OH physicians !!
- Within rehabilitation teams, the networking requests made by the FOD are often unknown from the ergo- and physiotherapists who are treating the worker…
- Networking involves an extra administrative burden for the centers and their staff is asked to be productive…
- The program is still marginal in the daily tasks of both rehab. centers and OH services
- Contacting the worker OP is sometimes difficult

Some conclusions from the Belgian case

- The most efficient way for implementing such an evidence-based intervention (the Canadian Sherbrooke model) at a country level warrants more research in the future

- An effective networking between physicians belonging to the curative sector and those active in preventive services would need
  - Time
  - Alterations of mutual misperceptions
  - Perception of benefits arising from this collaboration in daily practice
  - Incentives from the health system

More infos on the FOD program ?

Application forms ? List of rehabilitation centres ? Criteria to fulfill ?

Look at

http://fedris.be/fr/victime/maladies-professionnelles-secteur-prive/programme-de-reeducation-lombaire

http://fedris.be/nl/slachtoffer/beroepsziekten-privesector/revalidatieprogramma-voor-lage-rugpijn

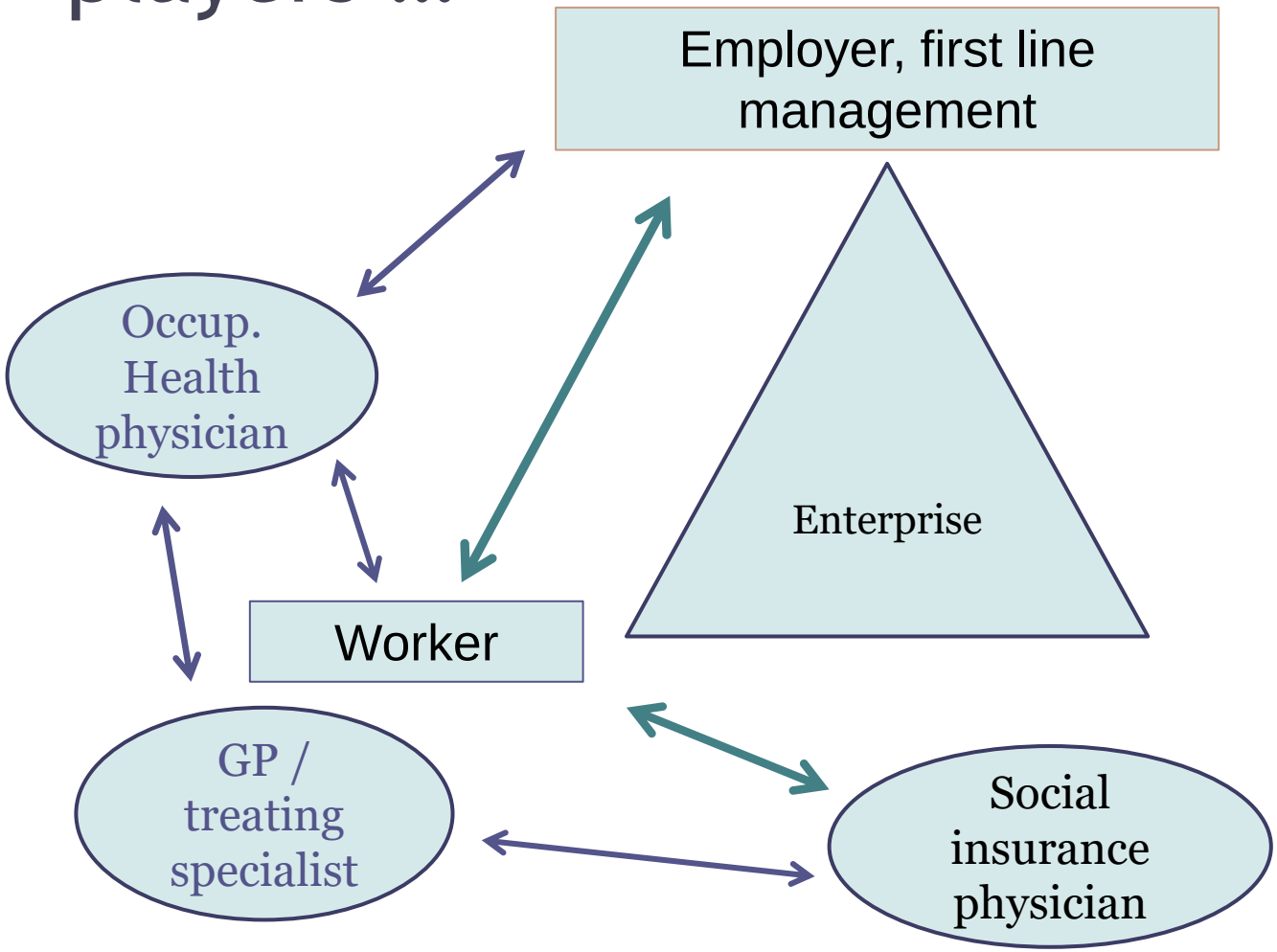
Partial return to work

Before …and after a change in regulation in 2013

Partial return to work (Art. 100. § 2nd) before April 2013

- *Is still considered as unfit for work the worker who comes back to a beforehand authorized work activity, providing* ***he maintains a minimum 50% reduction of medical capacity***
- In practice, the procedure implies
  - Some prior improvement in the worker health problem
  - His/her willingness to return to work
  - *A formal authorization of the insurance physician*
  - *The employer agreement for a partial return to work*
  - When back in part-time work, *earnings = the part-time fraction of his salary* ***and*** *a reduced sickness benefit* (up to a level corresponding often to the previous full-time salary)

Partial return to work ….the obvious players …



Partial return to work before April 2013

- In practice, the procedure was as follows
  - The worker (often at the suggestion of the GP, or upon request from the SIP) contact his/her employer and declare his/her willingness to return to work on a part-time basis
  - If an agreement is reached, he asks then for an appointment at the sickness fund
  - Some time later (usually 2 weeks but up to 4), he is examined by the SIP who gives (or not) his authorization for a half-time work schedule
  - This system promoted in fact a delayed RTW !

Partial return to work
Royal Decree starting April 12 2013

- ***The authorization*** *of the social insurance physician* ***is presumed to have been given*** *if the worker has sent his request for partial RTW at the latest on the working day just before the day of effective return to work*

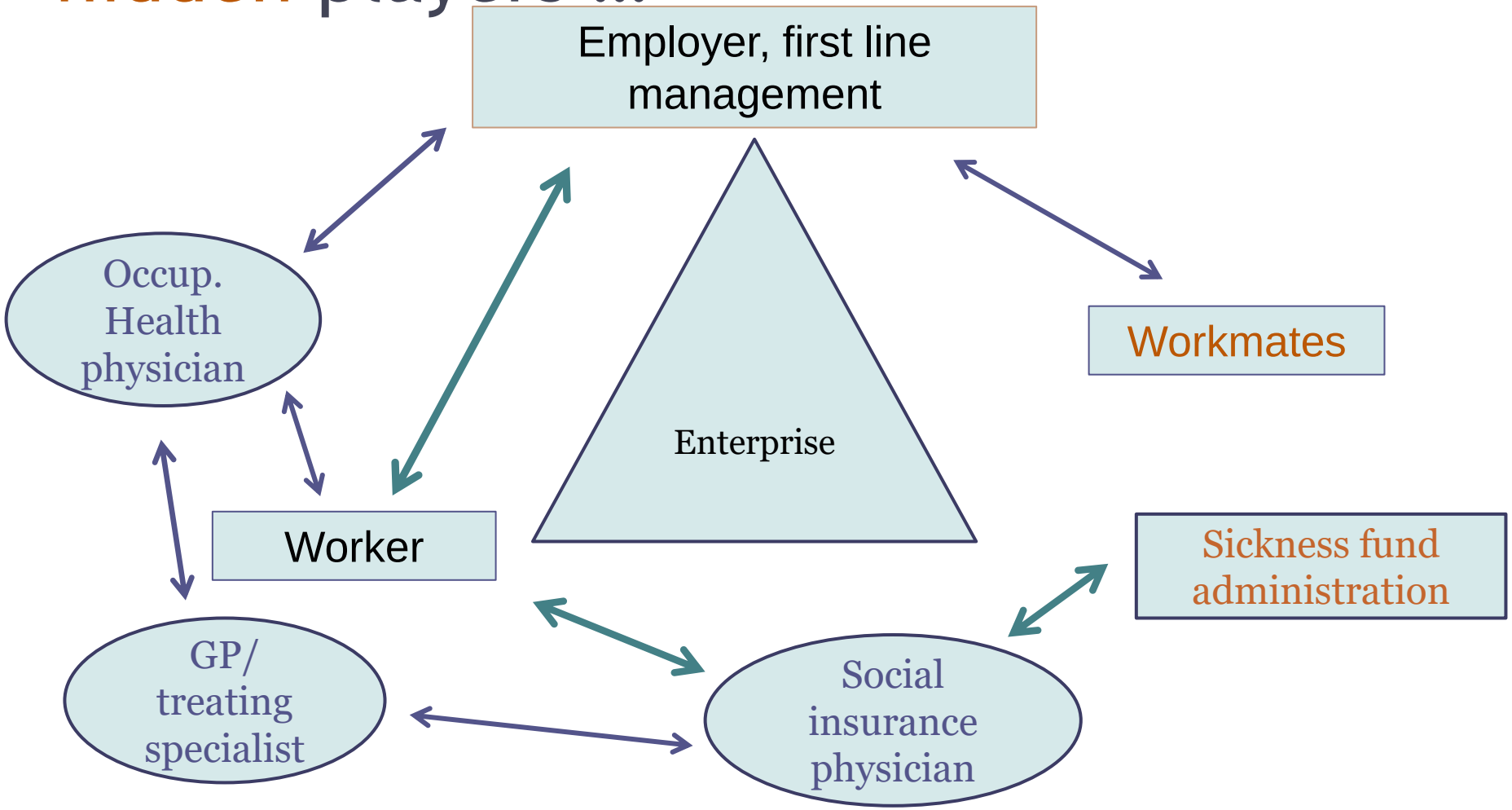
- *The final authorization will be given a posteriori (within the next 30 d) by the SIP and this would not necessarily request (as in the previous procedure) a medical examination of the beneficiary*

Partial return to work
Royal Decree – April 12, 2013

- Moreover the sickness funds will underline for their SIPs the flexibility allowed by the legal framework: it does not imply a half-time RTW ; in fact 20%, 30%, 40% or 60% or even 70% work time may be accepted !

- What is compulsory : to present a 50% reduction of work capacity on medical grounds

Partial return to work, the obvious and hidden players …



Partial return to work : some side-effects and hidden barriers….

- Partial RTW
  - an employment trap ?
  - a source of conflict in the working team ?
  - employer saying : no, we need 100% fit workers!
  - what an administrative burden !

Identification of sickness benefits recipients with a higher likelihood of successful reintegration at work

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History: political program of the new government Michel

- Art 153 from the program-law, 19 december 2014

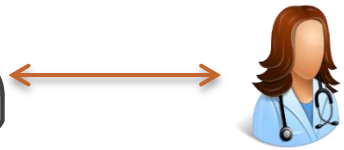
Il a été décidé par le gouvernement la mise en place d'un plan de réintégration. Concrètement, dans les trois mois qui suivent le début de la période d'incapacité primaire, un plan de réintégration multidisciplinaire doit être établi à l'intention du travailleur, par le médecin-conseil après une consultation approfondie entre celui-ci et les parties concernées (médecin traitant, médecin du travail, service régional de l'emploi...).

- Political negotiations in 2015 : traject with or without a stick behind the door ?
- December 2015: agreement of the « groupe des Dix » - voluntary basis maintained !

Belgian new reintegration paths – State Journal 24 november 2016

Treating physician

patiënt



SIP

Sick note

Quick scan

Sick note + 2m

referral

Occup. Health physician

Transition towards other possibilities

Re-integration traject possible?

NO

YES

Start of RTW process

Partial RTW possible

Medico-social analysis

Sick note + 4,5m

- Is herinschakeling mogelijk na
  - trajectbegeleiding
  - beroepsopleiding
  - herscholing?

Sick note + 5,5m

Follow-up

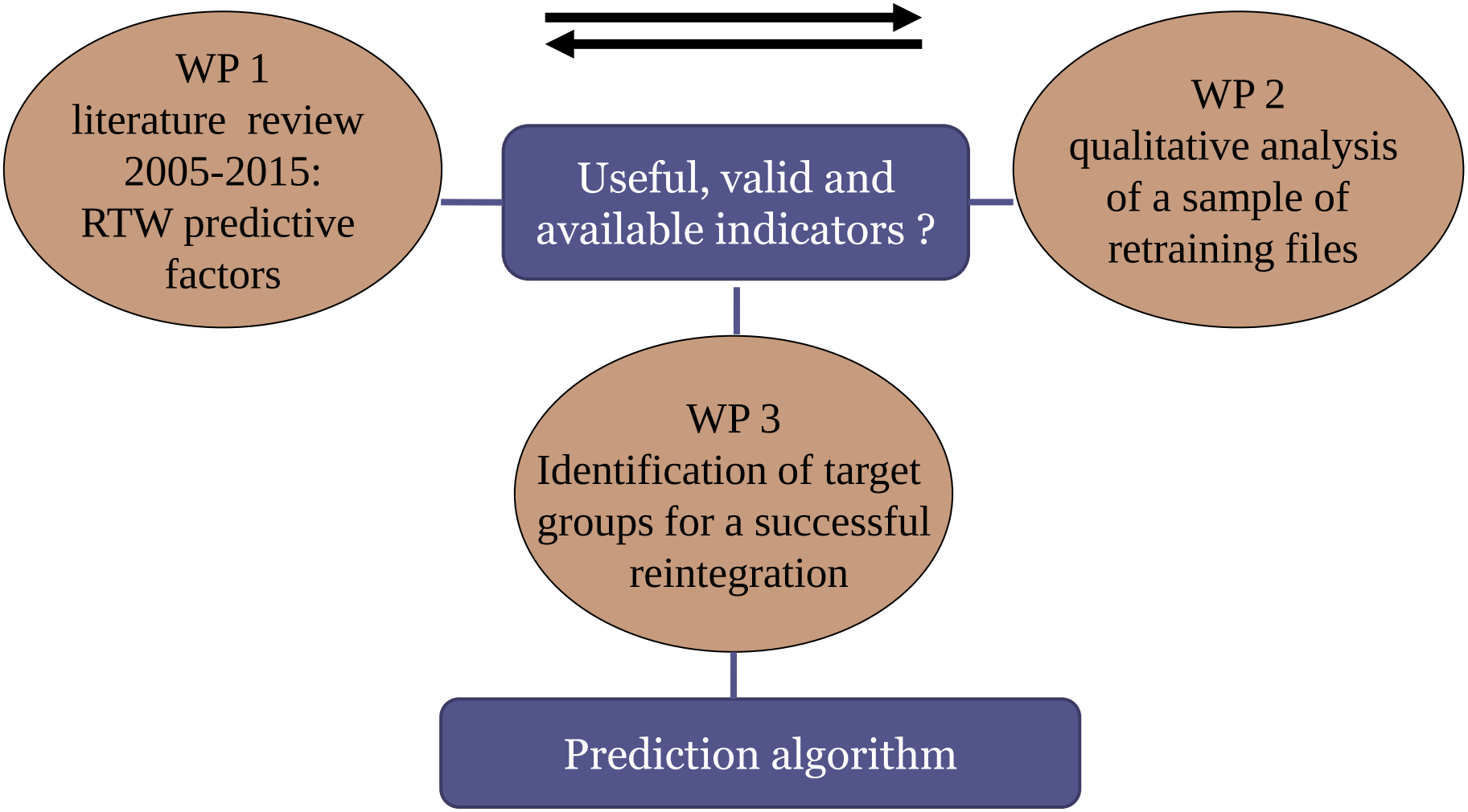
Every two months

Employer

How to make a quick scan of sickness benefits recipients ?

- Logistic challenge : N recipients on sick leave since >= 3 months …105 à 110.000 people / yr
- Scientific challenge : which criteria to classify those recipients in one of the four categories to be used to determine the reintegration path to follow ?
- National Institute for Health and Disability Insurance (NIHDI) commissioned a research study

Study design



WP1 - Literature review algorithms

(reintegration or rehabilitation or return to work) (((sick or sickness) (leave or absence)) or absenteeism or disability) (predict$) **OR** (reintegration or rehabilitation or return to work) (((sick or sickness) (leave or absence)) or absenteeism or disability) (((cardiac or cardiovascular or musculoskeletal) (diseases or disorders)) or (back pain) or (neck pain) or (mental (diseases or disorders)) or depression or anxiety or burnout or (adjustment (diseases or disorders)) or ((colorectal or colon) cancer))

Complement

(reintegration or return to work) (predict$) **OR** (reintegration or return to work) (((cardiac or cardiovascular or musculoskeletal) (diseases or disorders)) or (back pain) or (neck pain) or (mental (diseases or disorders)) or depression or anxiety or burnout or (adjustment (diseases or disorders)) or ((colorectal or colon) cancer))

Final check

return to work **AND** systematic

MS Disorders	Mental health	C.Vasc. Disease	Cancer	Others
1 MA 5 SR	1 MS 3 SR	(1) SR	1 MS 2 SR	1 MA 5 SR

Hallegraef et al., 2012 (MA)
Verkerk et al., 2012
Heitz et al., 2009
Iles et al., 2008
Kuijer et al., 2006
Steenstra et al., 2005

Andersen et al., 2012 (MS)
Cornelius et al., 2011
Blank et al., 2008
Michon et al., 2005

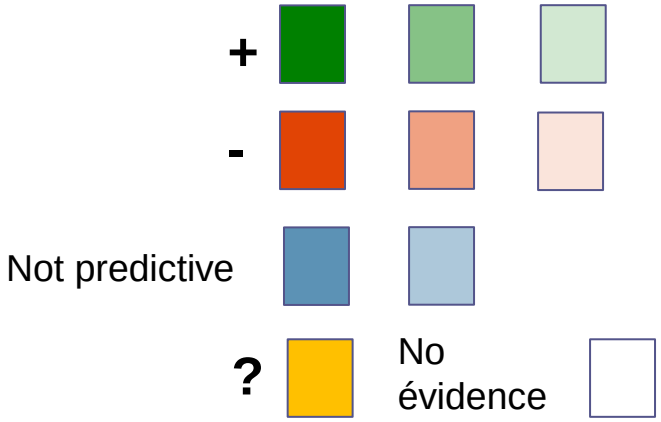
Detaille et al., 2009

Stergiou-Kita et al., 2014 (MS)
Islam et al., 2014
Van Muijen et al., 2013

Duijts et al., 2007 (MA)
Garrelfs et al., 2015
Cancelliere et al., 2104
Saltychev et al., 2013
Detaille et al., 2009
Van Velzen et al., 2009

Analysis of 15 systematic reviews, 2 meta-analyses, 2 qualitative meta-syntheses

Colour codes for results presentation



+ Promoting RTW
- Delaying RTW

Results

Evidence level

S: Strong M: Moderate W: weak I:Insufficient

	S	M	W	I	S+	M+	W+	no	S not	W not	N. Reviews
Homogeneous results											
expectation about recovery and Self efficacy (good)					5		2				7
Smoking								1	2		3
Results with some inconsistencies											
Age (old)	5		1	3				2		1	12
Gender (female)	1	2	2	4				3	1		13
Educational level (high)				2	2	1	1	2	1	1	10
Health status (bad)	2							1		1	4
pain (presence)	1	2	2	2					1		8
workload (heavy)	3	2	1	1				2			9
job satisfaction						1		1	2		4

WP2 – NIHDI files analysis : indicators availability

Indicators	Measurement ?
Age	Birth date
Gender	○ Man / Women
Education level	○ No education ○ Primary school ○ Secundary school ○ Bachelor ○ Master
Perception health status	No measurement
Expectations about recovery and RTW	No measurement
Self-efficacy	No measurement
Pain	No measurement
Heavy work	No measurement
Work satisfaction	No measurement

WP2 - Records quality and usability

- Many open questions
- Few predetermined answer categories
- Few standardised coding systems are used

  (i.e. ISCO for occupation not used)
- No use of validated questionnaires

Quantitative analyses hard to perform!

WP3 - NIHDI database analysis
Success vs « Failure or Abandon » (n=304 files)

	Assessment after training program				
	Success (n = 131)		Failure (n = 173)		
Variable	n	N (%)	n	N (%)	p
Gender	131		173		0.63
Women		63 (48.1)		88 (50.9)	
Men		68 (51.9)		85 (49.1)	
Age (years)	129	41.7 ± 8.01	168	40.2 ± 7.97	0.13
Mean ± SD					
Occupational category	128		170		0.55
Office work		27 (21.1)		25 (14.7)	
Manual work		75 (58.6)		106 (62.4)	
Health sector		17 (13.3)		26 (15.3)	
Others		9 (7.03)		13 (7.65)	

NIHDI Database analysis
Success vs « Failure or Abandon » (n=304 files)

	Assessment after training program				
	Success (n = 131)		Failure (n = 51)		
Variable	n	N (%)	n	N (%)	p
Pathology	128		172		0.46
Musculo-skeletal diseases		46 (35.9)		73 (42.4)	
Mental disorders		29 (22.7)		41 (23.8)	
Injury and poisoning		20 (15.6)		26 (15.1)	
Others		33 (25.8)		32 (18.6)	
Disability duration before retraining (years) - P50 (P25 – P75)	126	2.38 (1.38 – 3.37)	162	2.64 (1.47 – 4.00)	0.22

- No statistical difference
- The available parameters have no influence on the assessment results after completion of the retraining program

Conclusions of this study

- Few factors are of predictive value for a successful reintegration at work
- They are either not recorded in the NIHDI files or recorded in a non-valid or non-usable way
- Research team recommendations :
  - Inclusion of complementary variables in the recipient file
  - Use of validated questionnaires for assessing some variables and of standardized coding systems for others
- Further ongoing research :
  - development of a short self-administered questionnaire that will be sent to the sickness benefit recipient after 6 weeks sick leave

New legal framework for reintegration : pro's and con's

- Pro's
  - Early intervention of the health care system
  - Structured collaboration with OP's and workplace settings
  - Patient voluntary participation
- Con's
  - No incentives for employers
  - Underlying cost-cutting objectives
  - No communication platform between physicians available yet

Thank you for your attention
Merci pour votre attention
Dank u voor uw aandacht

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